

JPL BARCODE SPECIFICATION

This document outlines the barcoding requirements for all of the deliveries of material purchased from our iProcurement Subcontractors. Barcoded labels are to be applied to the packages.

1.0 Barcode Software

1.1 The following products are examples of software that can offer the necessary elements to meet the barcode requirements.

1.1.1 Label Matrix by Strandware

1.1.2 BAR-ONE by Zebra Software

2.0 Barcode Printer

2.1 The following items are required for printing the barcode labels.

2.1.1 Barcode Printer

2.1.2 Coated paper

3.0 Acceptable Labels

3.1 Physical characteristics of the Labels:

3.1.1 Selected labels shall be standard white coated stock for use with barcode printers.

3.1.2 The label stock shall use permanent adhesive.

3.1.3 Label stock shall be sufficiently scuff and wear resistant to meet scanability requirements.

3.2 Each Delivery Label must contain the following information:

3.2.1 Purchase Order Number barcode in accordance with 4.0 and 7.0 below. This barcode must be easily distinguishable from any Purchase Order Line barcode(s). See example label 6.1.

3.2.2 Purchase Order Number in human readable format.

3.2.3 Purchase Order Line barcode(s) in accordance with 4.0 and 7.0 below. The Purchase Order Line barcode(s) must be associated with the Purchase Order Number mentioned in 3.2.1 and must be easily distinguishable from the Purchase Order Number barcode.

3.2.4 Purchase Order Line(s) in human readable format.

3.2.5 Items 3.2.2 and 3.2.4 above must be in at least 14 point type.

Note: Items 3.2.1 (Purchase Order Number) and 3.2.3 (Purchase Order Line and Purchase Order Line Quantity) will be provided through electronic data interchange (EDI) or commerce eXtensible Markup Language (cXML).

3.3 Each Box Count Label must contain the following information:

3.3.1 The text "PO Number: " (do not include apostrophes).

3.3.2 Purchase Order Number in human readable format.

3.3.3 The text "Box X of X" where the first X indicates the current box count and the second X indicates the total box count (do not include apostrophes).

3.3.4 Items 3.3.1, 3.3.2 and 3.3.3 above must be in at least 18 point type.

4.0 Barcode Printing

4.1 The acceptable barcode symbology is Uniform Code Council (UCC) Code 128.

4.2 Bars must conform to UCC Code 128 specifications, be at least 0.5 inch in height, printed in standard pitch, with at least one inch of separation, both vertically and horizontally, from any other barcodes printed on the container. If a non-JPL barcode is printed on the container it must be separated from the JPL barcode so that it is obviously not part of the JPL series of barcodes. A horizontal and/or vertical line must separate all JPL barcodes (see 6.1).

4.3 Provision for UCC Code 128 check digit, if required by JPL.

4.4 Alternate barcode symbologies may be acceptable (Interleaved 2 of 5, etc.) and will be discussed on a case-by-case basis.





5.0 Barcode Quality Requirements

5.1 All barcodes must grade as "B" or above (as measured with a calibrated barcode verifier at receipt at JPL) 99% of the time.

6.0 Examples of Acceptable Labels

The following labels are examples of acceptable labels for attachments to product(s) delivered to JPL:

6.1 Example of a Delivery Label.

| | |
|---|--------------------|
| PO NUMBER  1280086 | |
| LINE NUMBER 1 | QUANTITY 1 |
|  1 + Q1 | |
| LINE NUMBER 2 | QUANTITY 10 |
|  2 + Q10 | |
| LINE NUMBER 3 | QUANTITY 5 |
|  3 + Q5 | |

6.2 Example of Box Count Label.

| |
|---------------------------|
| PO NUMBER: 1272850 |
| Box 1 of 3 |

7.0 JPL Barcode Formats

7.1 The Purchase Order barcode will be composed of the following elements:

7.1.1 Purchase Order Number.

7.2 The Purchase Order Line barcode will be composed of the following elements:

7.2.1 Purchase Order Line Number.

7.2.2 A series of four Carriage Returns.

7.2.3 A Plus Sign (+) and a Q.

7.2.4 The quantity of material being delivered for this Purchase Order Line.

8.0 Containers

8.1 A Purchase Order with Purchase Order Lines in separate containers.

8.1.1 When a Purchase Order will have Purchase Order Lines delivered in multiple containers, a separate Delivery Label, as outlined in 3.0 above, should be affixed to each of the containers. For example, if a Purchase Order with four lines will be delivered with lines one and two in container number one, and lines three and four in container number two, each of the containers will have a separate Delivery Label. The first Delivery Label will have the Purchase Order Number and Purchase Order Line barcodes for lines one and two. The second Delivery Label will have the Purchase Order Number and Purchase Order Line barcodes for lines three and four.

8.1 A Purchase Order Line in multiple containers.

8.1.1 When a Purchase Order Line will be shipped in multiple containers, all of the containers must arrive in the same shipment. For example, if three containers will be used for shipping a Purchase Order Line, the containers should be labeled as follows: One of the containers must have a Delivery Label affixed as outlined in 3.0 above. The box with the Delivery Label will also have a Box Count Label affixed as outlined in 3.0 above. Container numbers two and three will also have Box Count labels affixed as outlined in 3.0 above. The receiving dock personnel will not perform the Purchase Order Receipt until all of the containers associated with a Purchase Order Line have been located.

8.2 Multiple Purchase Orders Lines in a single container.

8.2.1 The Delivery Label, as outlined in 3.0 above, should reflect all of the Purchase Order Lines contained within the container. Every effort should be made to include the Purchase Order Number and all of the Purchase Order Line Numbers on a single Delivery Label. If this is not possible, then a second (third etc.) Delivery Label should be affixed to the outside of the container. The Purchase Order Number will be the same for all of the Delivery Labels in this situation.

- 8.3 Multiple Purchase Orders in a single container
 - 8.3.1 In this situation do not affix a Delivery Label to the outside of the container. Inside the container separate Delivery Labels will be affixed to each of the items/containers in accordance with 8.2.1 above.